In the Specification

Please delete paragraph [0040] and substitute the following therefor:

When the welding power source secondary contactor switches ON, the welding circuit is energized providing voltage to the wire feeder and welding circuit. The wire feeder can operate for the 3 to 5 second period set by timing circuit C9, R9. If during that time, no arc is established, MOSFET transistor Q1 switches OFF and turns OFF the welding power source secondary contactor. Alternatively, if a welding arc is established during the 3 to 5 seconds of initial time, a current feedback signal that is scaled so that 100 amps of welding current equals approximately 1 volt of feedback is present at RC1 (pin 5). Input buffer amplifier A1 (pins 8, 9, and 10) increases the signal amplitude with a gain of approximately 32. The output of current sensing circuit buffer A1 (pin 8) is applied to the input of comparator A1 (pins 12, 13, and 14). Comparator A1 (pins 12, 13, and 14) is biased to switch at approximately 7.5 volts by resistors R7 and R8. The 7.5 volt bias corresponds to approximately 25 amperes of welding current. Therefore, any welding current value greater than 25 amperes will hold the output (pin 14) of comparator A1 at +15 volts. Resistor R38 protects the input to inverter ~~U1 (pin 5)~~ U3 (pin 13) when (pin 14) of A1 is at negative 15 volts. When arc current is greater than 25 amperes and (pin 14) of comparator A2 is positive, (pin 11) of gate U3 switches negative. The output of gate U3 (pin 11) is coupled through resistor R34, diode D11, and resistor R10 to timing capacitor C9 to provide a parallel impedance to timing resistor R9. This reduces the timing pulse from the voltage sensing circuit when arc current greater than 25 amperes is present. The output of gate U3 (pin 11) is also connected to the input of inverter U1 (pin 9). When (pin 14) of comparator A1 switches to +15 volts, (pin 8) of inverter U1 also switches to +15 volts. The output of inverter U1 (pin 8) is coupled to the gate of MOSFET transistor Q1 through diode D5. When MOSFET Q1 switches ON, its output signal is coupled through optical isolator OC1 to switch ON and maintain the secondary contactor in the welding power source in the ON state. Resistor R11 and capacitor C10 provide a brief time delay, (10 to 20 milliseconds) to maintain MOSFET Q1 ON in the event of a brief arc outage while welding.